CHEMISTRY FOR ENVIRONMENTAL PROFESSIONALS – APPLIED (165.21) 2 DAYS

This course provides participants with an introduction to applied environmental chemistry principles and practices which underlie the release, fate and transport, sampling, analysis, and cleanup of chemicals contaminating environmental media. This course is designed for environmental professionals who are not chemists, but who require a basic knowledge of chemistry and environmental chemistry in their work.

Specific topics include: a survey of selected chemical industries or processes that release hazardous chemicals into the environment; fate and transport of chemicals in environmental media; data quality objectives, including the control of false positive and false negative decision errors; and data usability, including defining detection limits and data qualifiers.

This course is preceded by the Chemistry for Environmental Professionals – Fundamentals Course. Students are encouraged to request both courses when registering.

The Chemistry for Environmental Professionals – Applied course will begin each day at approximately 8:00 a.m. The course will end at 5:00 p.m. on the first day and approximately 12:00 p.m. on the second day.

After completing this course, participants will be able to:

- List key chemicals and modes of release associated with selected chemical industries or processes.
- Describe the chemical, soil, water, and geological properties which govern the fate and transport of chemicals in environmental media.
- List chemical parameter changes associated with aerobic and anaerobic degradation of hydrocarbons in subsurface media.
- Identify the elements of the data quality objective (DQO) process.
- Evaluate the consequences of false positive and false negative decision errors.
- Describe procedures and practices commonly employed to ensure the quality and usability of analytical chemical data.
- Define common terms and parameters used to evaluate and communicate the quality and usability of analytical chemical data.

Note: Calculators are highly recommended.

Continuing Education Units: 1.0

Course Dates and Locations

2001

November 1–2	Region 4	December 20–21	Region 7

2002

January 10–11	Region 1	May 2–3	Region 2
January 31 – February 1	Region 8	May 16–17	Region 5
March 7–8	Edison, New Jersey	June 13–14	Region 6
March 21–22	Cincinnati, Ohio	September 12–13	Region 10
April 4–5	Region 3	September 26–27	Region 9